

IN THE CLAIMS

1. (Previously Amended) A remote controller for controlling digital household appliance including at least one device, the remote controller comprising:

a radio unit configured to operate in at least two wireless communication modes;

a control unit configured to select one of the at least two wireless communication modes;

and

a memory unit,

wherein the control unit selects one wireless communication mode from the at least two wireless communication modes according to control commands inputted by a user, and the radio unit transmits the control commands to the device for controlling operations of the device and transmits multimedia data stored in the memory unit to the device in the selected wireless communication mode.

2. (Previously Amended) The remote controller according to Claim 1, wherein the radio unit comprises a low power dissipation radio unit and a high speed transmission unit.

3. (Previously Amended) The remote controller according to Claim 2, wherein the low power dissipation radio unit is configured to a wireless communication protocol including but not limited to Bluetooth protocol, Zigbee protocol and IrDA infrared protocol.

4. (Previously Amended) The remote controller according to Claim 2, wherein the high speed transmission unit adopts one of wireless communication protocols including but not limited to HomeRF protocol, UWB protocol, IEEE802.11x protocol, IEEE802.11a protocol, IEEE802.11b protocol, IEEE802.11d protocol, IEEE802.11g protocol, IEEE802.15 protocol, IEEE802.16 protocol, IEEE802.3 protocol, GSM protocol, GPRS protocol, CDMA protocol, 2.5G protocol and 3G protocol.

5. (Previously Amended) The remote controller according to Claim 2, wherein the operation of the low power dissipation radio unit is preset as a default mode.

6. (Previously Amended) The remote controller according to Claim 1, wherein the control unit selects one corresponding communication mode from the at least two wireless communication modes according to the control commands inputted by the user and characteristics of the multimedia data transmitted by the radio unit.

7. (Previously Amended) A wireless control system for digital household appliance including at least one device, wherein the device is provided with a receiver comprising a memory unit, the system comprising:

a remote controller comprising a memory unit, and configured to operate in at least two wireless communication modes,

wherein the remote controller selects one wireless communication mode according to control commands to transmit the control commands and multimedia data stored in the memory unit of the remote controller to the receiver in the selected wireless communication mode, and

wherein the receiver is configured to receive the control commands and the multimedia data transmitted by the remote controller and store the multimedia data transmitted by the remote controller into the memory unit of the receiver.

8. (Previously Amended) The system according to Claim 7, wherein the remote controller further comprises a low power dissipation radio unit and a high speed transmission unit and said remote controller transmits in at least two wireless communication modes operating the low power dissipation radio unit and the high speed transmission unit.

9. (Previously Amended) The system according to Claim 8, wherein the low power dissipation radio unit and the high speed transmission unit are switchable under the control of a control unit.

10. (Previously Amended) The system according to Claim 8, wherein the low power dissipation radio unit adopts one of wireless communication protocols including but not limited to Bluetooth protocol, Zigbee protocol and IrDA infrared protocol.

11. (Previously Amended) The remote controller according to Claim 1, further comprising an interface unit, wherein the remote controller is configured to access external memory via the interface unit.

12. (Previously Amended) The remote controller according to Claim 11, wherein the radio unit is configured to transmit data accessed from the external memory.

13. (Previously Amended) The system according to Claim 7, wherein the receiver is configured to operate in at least two wireless communication modes.

14. (Previously Amended) The system according to Claim 8, wherein the receiver is configured to select one wireless communication mode according to the selected wireless communication mode of the remote controller.

15. (Previously Amended) The system according to Claim 7, wherein the remote controller further comprises an interface unit, and the remote controller is configured to access external memory via the interface unit.

16. (Previously Amended) The system according to Claim 15, wherein the remote controller is configured to transmit data accessed from the external memory.

17. (Previously Amended) The system according to Claim 7, wherein the remote controller selects one wireless communication mode according to control commands inputted by the user and characteristics of the multimedia data transmitted by the remote controller.

18. (Previously Amended) A remote controller for controlling digital household appliance including at least one device, the remote controller comprising:

a radio unit configured to operate in at least two wireless communication modes, wherein the radio unit comprises a low power dissipation radio unit and a high speed transmission unit, and wherein the low dissipation radio unit is configured to a wireless communication protocol including but not limited to Bluetooth protocol, Zigbee protocol and IrDA infrared protocol;

a control unit configured to select one of the at least two wireless communication modes; and

a memory unit,

wherein the control unit selects one wireless communication mode from the at least two wireless communication modes according to control commands inputted by a user, and the radio unit transmits the control commands to the device for controlling operations of the device and transmits multimedia data stored in the memory unit to the device in the selected wireless communication mode.